2.0 OPERATING ENVIRONMENT

The purpose of this section is to provide an overview of the operating environment in which MDT provides transit service. The primary areas of focus include analysis of existing demographics, economic conditions, and land use patterns. These factors are presented in an effort to create a description of Miami-Dade County and measure the extent to which MDT service effectively meets the transportation needs of the county.

2.1 Service Area Description

According to the U.S. Census Bureau, Miami-Dade County encompasses a total area of 2,431 square miles. Approximately 1,946 square miles (80%) of the County is land and 485 square miles (20%) is comprised of water, most of which is Biscayne Bay and another significant portion being the adjacent waters of the Atlantic Ocean. Miami-Dade County borders two national parks. Biscayne National Park is located east of the mainland, in Biscayne Bay, and the western third of Miami-Dade County lies within Everglades National Park.

The Urban Area is approximately 420 square miles (excluding bay and ocean waters) of which MDT's service area covers approximately 342 square miles or 81.4 percent (81.4%)(Figure 2-1). Miami-Dade County as a whole is composed of 35 individual municipalities.

Biscayne Bay is separated from the Atlantic Ocean by the many barrier isles along the coast, one of which is where well-known Miami Beach is located, home to South Beach and the Art Deco district.

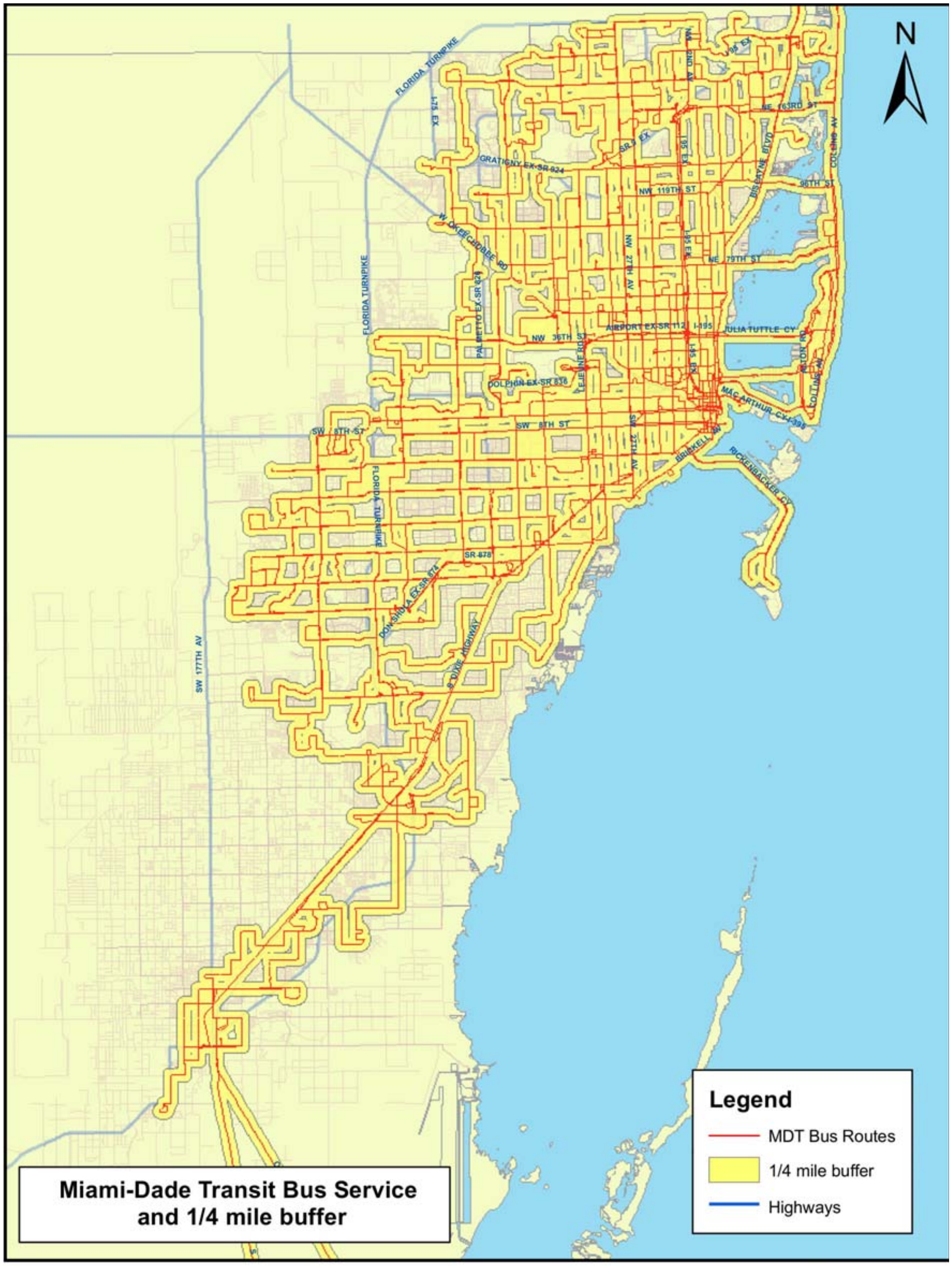
2.1.1 Land Use

The land use for Miami-Dade County is classified by ten (10) categories: Residential, Commercial and Office, Industrial, Institutional, Parks/Recreation, Transportation/Communication/Utilities, Agriculture, Undeveloped, Inland Waters, and Coastal Waters (Figure 2-2). Land uses comprising the largest proportion of Miami-Dade County are parks and recreational, ocean water bays and oceans, and undeveloped uses (Table 2-1).

Future growth is governed by the Miami-Dade County Comprehensive Development Master Plan (CDMP) which includes the previously adopted plans of the CDMP Land Use Element and established land use and zoning patterns as well as the County's policy regarding future zoning and land use patterns. The CDMP controls growth so that the expansion of the urban area occurs according to the following guidelines:

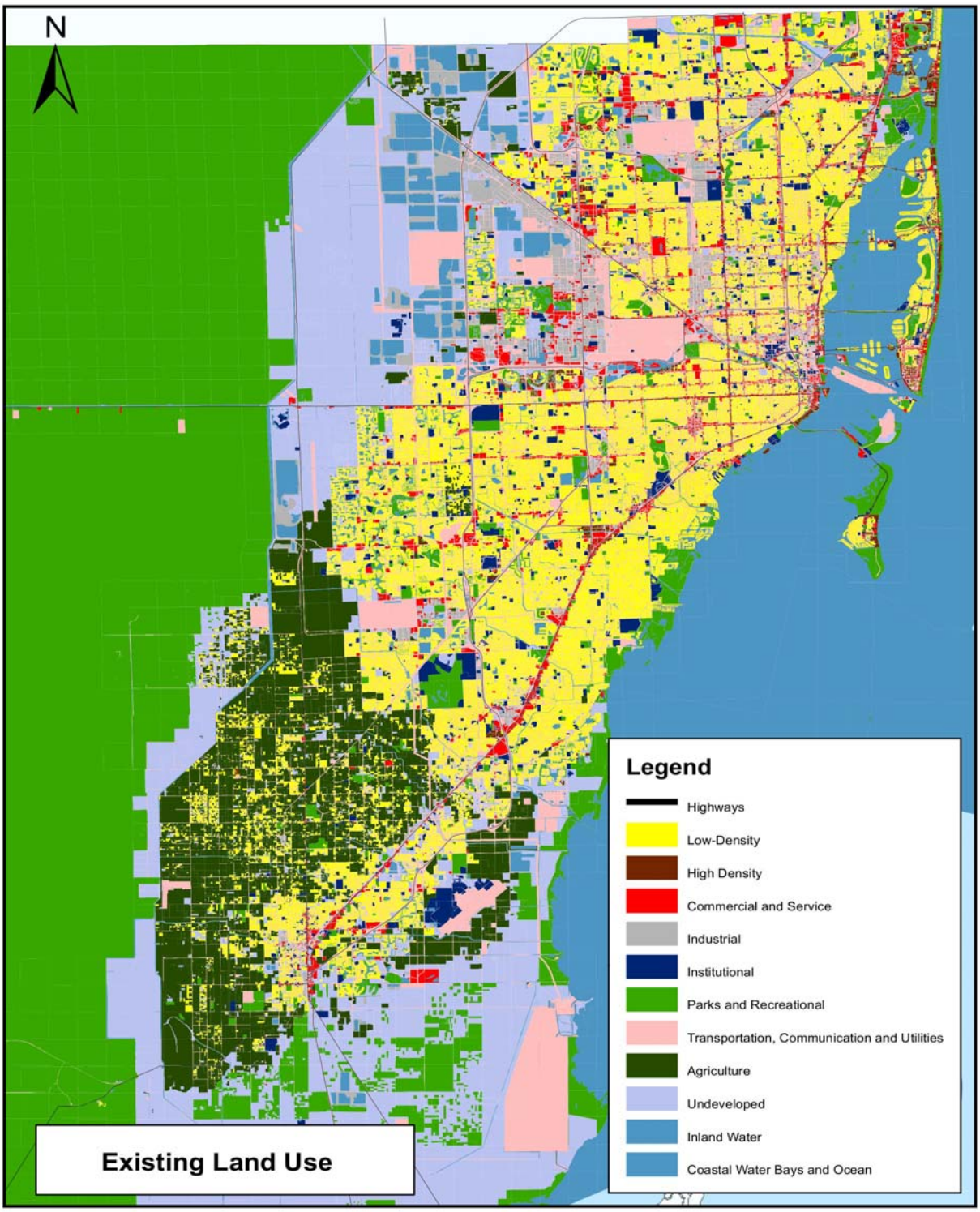
- At a rate commensurate with projected population and economic growth.
- In a contiguous pattern centered around a network of high-intensity urban centers well connected by multimodal intra-urban transportation facilities.
- In locations which optimize efficiency in public service delivery and conservation of valuable natural resources.

Figure 2-1: MDT Service Area Coverage



Source: Miami-Dade Transit, 2009

Figure 2-2: Existing Land Use Map



Source: Miami-Dade County Department of Planning and Zoning, 2009

Table 2-1: Miami-Dade County Land Uses

	Land Use	Area (Acres)	Percentage
1	Parks/Recreational	789,632	51.0%
2	Coastal Water	278,006	18.0%
3	Undeveloped	135,272	8.7%
4	Residential	109,475	7.1%
5	Transportation/ Communication/Utilities	87,295	5.6%
6	Agriculture	61,573	4.0%
7	Inland Waters	40,966	2.6%
8	Industrial	17,531	1.1%
9	Commercial and Office	14,790	1.0%
10	Institutional	14,182	0.9%
	Total Area (Acres)	**1,548,722**	**100%**

Source: Miami-Dade County Department of Planning and Zoning, 2009

The objectives and policies in the Land Use Element of the CDMP emphasizes concentration and intensification of the development around activity and urban centers located in the areas having high county-wide multimodal accessibility and along the major transit corridors that link them.

The CDMP establishes that land uses in this area shall be planned and developed in the manner that is compatible with and supports use of transit systems and alternative transportation modes that accommodate a concentration and variety of uses and activities which will attract large numbers of both residents and visitors.

2.1.2 Major Trip Generators

An analysis measuring the adequacy of transit services was conducted to identify major attractors and trip generators. Table 2-2 describes the transit services provided for each identified special generators in terms of number of routes and accessibility of these facilities. The major trip generators within the County are presented in Figure 2-3. Areas within the urban core such as Downtown Miami (including the Omni and Brickell areas) and South Miami Beach were omitted due to the extraordinary high level of transit service in place at these locations. Miami-Dade County boasts a high number of public and private colleges and universities within the region which are also served by transit (Figure 2-4).

Event-oriented facilities were also omitted due to the ad-hoc nature of these occurrences. MDT is not permitted to provide special event shuttle service per Federal Transit Administration (FTA) rule. However, football events at Land Shark Stadium are served with additional park and ride services covering the entire Miami-Dade area. Broward County Transit also provides park and ride services to these events.

Table 2-2: MDT Major Trip Generators, December 2008

MAJOR GENERATORS	ROUTES					COMMENTS
Special Attractors						
Coconut Grove	6	22	27	48	249	Service on major arterials
Miami International Airport	J	7	37	42	57	Bus terminal on site; shuttle to Tri-Rail Station
	132	133	238			
Metrozoo	252					On-site service to entrance
Miami Seaquarium	B					Service on adjacent roadways
Port of Miami	243					On-site service via local roadways
South Beach	C	H	K	M	S	Service on major arterials
	SoBe Local					
Educational Centers						
Barry University	2	10	75			Service on local roadways
FIU - University Park	8	11	24	71		Bus terminal area with shelters on-site
FIU - Biscayne Bay	28	83	93			Service on-site and on local roadways
Florida Memorial	32					Service on local roadways
MDC - Homestead	34	35	38	344		Service on local roadways
MDC - Interamerican	8	27	207	208		Service on local roadways
MDC - Kendall	35	56	71	104	204	Service on local roadways and on-site service with shelters
MDC - Medical Center	M	12	21	22	32	Service on local roadways
MDC - North	21	27	32	75	97	On-site terminal with shelters
MDC - West	36					Service on local roadways
St. Thomas University	32					Service on local roadways
University of Miami	48	56	500	Rail		Service on local roadways
Regional Retail Centers						
Aventura Mall	E	S	3	9	93	On-site terminal service
	95	99	183			
Bal Harbour Shops	G	H	K	S		Adjacent on-street service with shelters
	120					
Dadeland Mall	1	52	73	87	88	Service on adjacent roadways Pedestrian walkway to rail station
	104	204	240	272	288	
	Rail	500				
Diplomat Mall (Broward County)	K	3				Service on adjacent roadways
Dolphin Mall	7	36	71	137	238	On-site terminal with shelters
(The) Falls	1	31	34	38	52	Service on SW 136th Street and Busway Station at SW 136th Street
	65	136	252	287		
Mall of the Americas	7	11	87			On-site service with shelters

Table 2-2: MDT Major Trip Generators, December 2008 (continued)

MAJOR GENERATORS	ROUTES					COMMENTS
Miami International Mall	7	36	71	137	238	Service on adjacent roadways
Prime Outlets	35	70	344			On-site and adjacent roadway service
Skylake Mall	H	9	91	95	183	Adjacent on-street service Route 95 provides service four times a day
Southland Mall	1	31	35	38	52	Service on adjacent roadways
	70	137				
Westland Mall	29	33	54			Service on adjacent roadways
163 Street Mall	E	H	2	3	9	Off-site terminus with shelters Route 95 provides service four times a day
	10	16	22	75	83	
	91	95	246			
Regional Hospitals						
Aventura	3	9				Service on adjacent and local roadways
Baptist	88	104				Service on adjacent roadways
Doctors'	56					Service to entrance on local roadway
Hialeah	L	28	42			Service on adjacent roadway
Homestead	35					Service on local roadway
Jackson Memorial / U.M. /Cedars of Lebanon / Veterans Affairs	M	12	21	22		Service on adjacent roadways
	32	95	246	500	Rail	
Jackson North	E	22	246			Service on adjacent roadways
Jackson South	52	57	252			Service on adjacent roadway
Kendall AMI	40	240				Service on adjacent roadway
Mercy	12	48				On-site service with shelters
Miami Children's	56					On-site service with shelters
Miami Heart Institute	R					Service on local roadway
Mount Sinai	C	M	R			On-site service; planned terminus
North Shore	33					Service on adjacent roadway
Palmetto General	29					On-site service with shelters
Palm Springs General	33	54				On-site service with shelters
South Miami	37	52	57	72	73	Service on adjacent roadways
	500	Rail				

Source: MDT, 2008. Note: Rail stands for Metrorail.

Figure 2-3: Miami-Dade County Major Trip Generators by Type

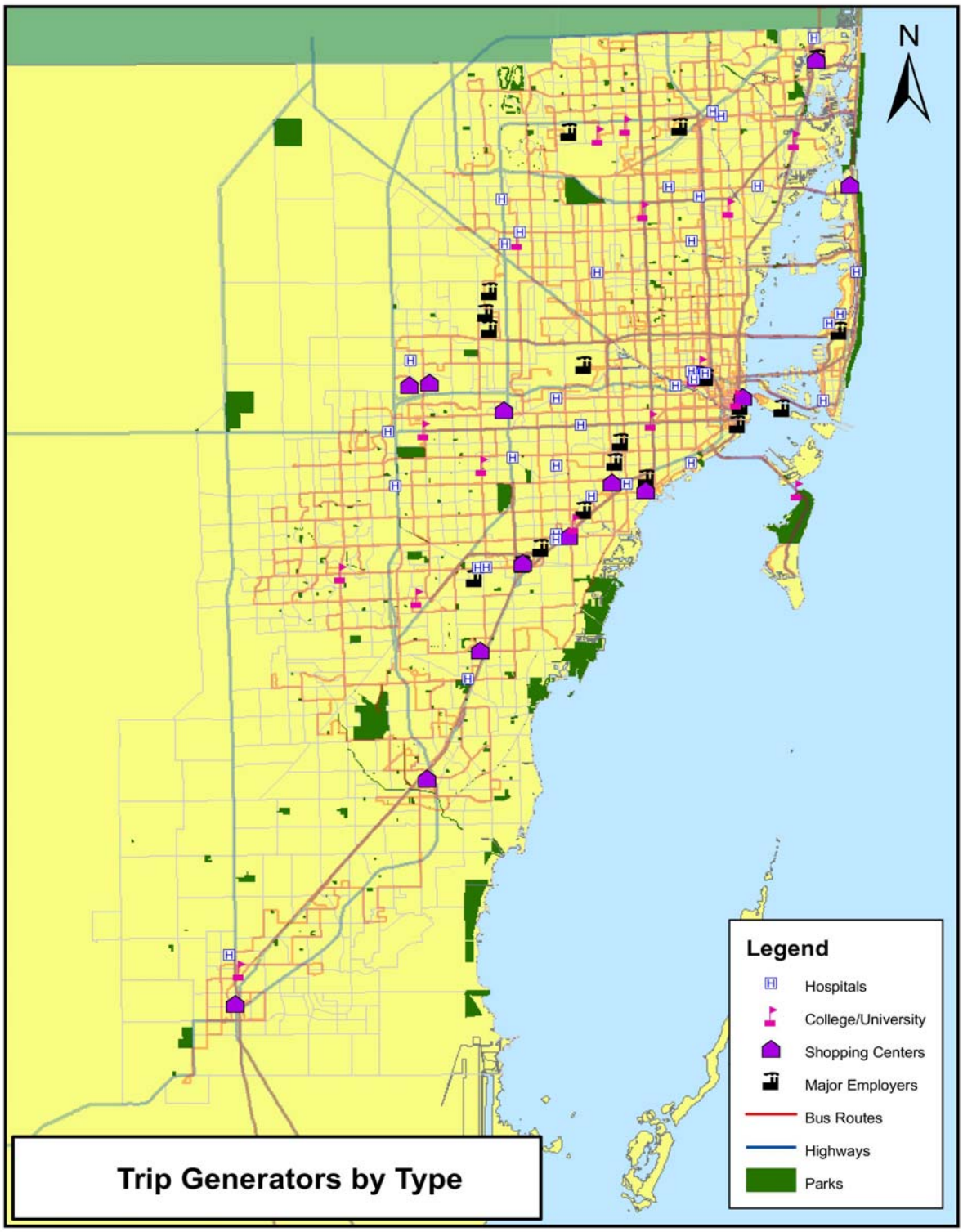
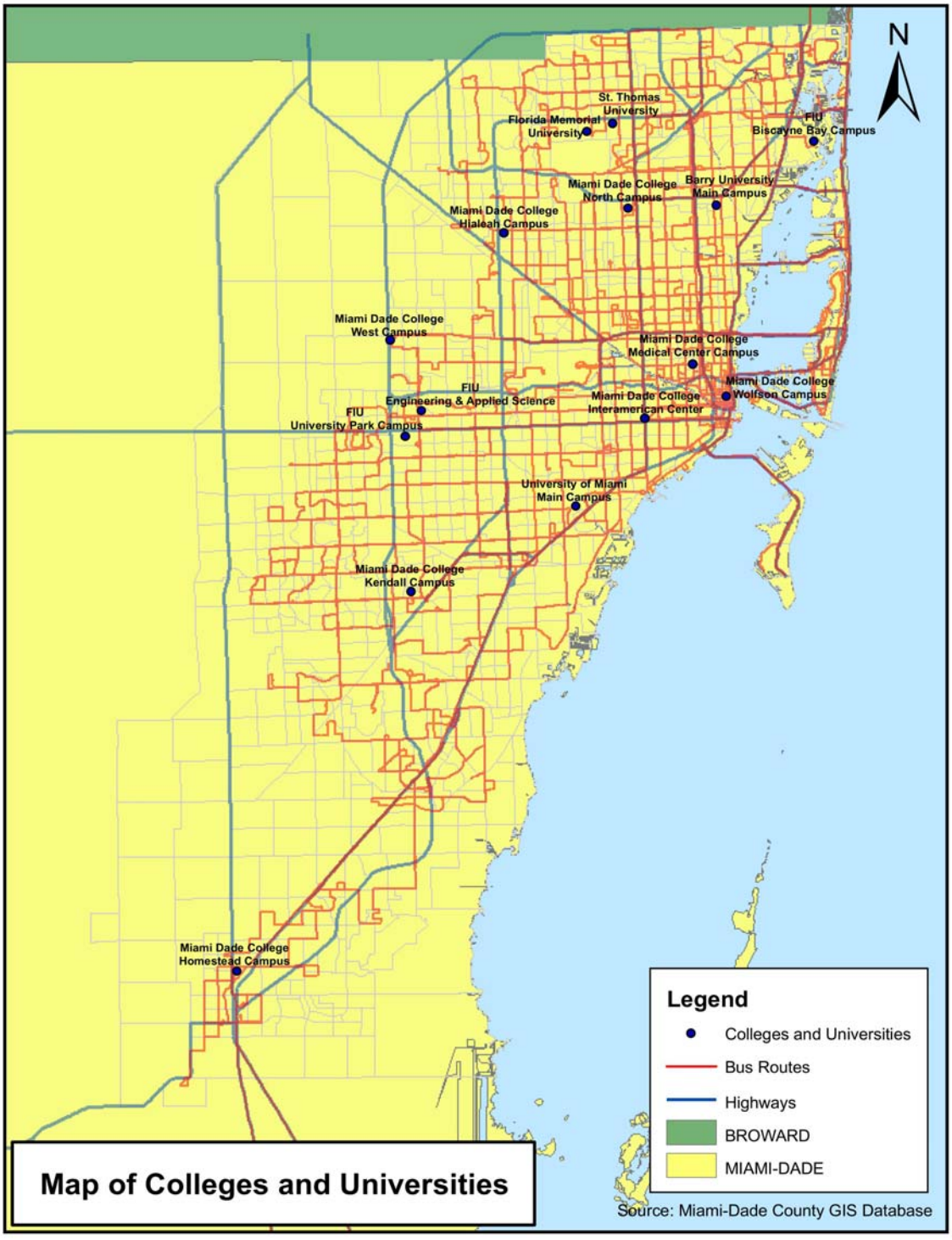


Figure 2-4: Miami-Dade County Colleges and Universities



Source: Miami-Dade County GIS Department

2.1.3 Transportation System

Miami-Dade County Highway System

Miami-Dade County has 11 principal arterials as defined from the Florida Department of Transportation (FDOT) Functional Classification designations. Interstate 95 (I-95) is the main north-south highway throughout the county. This highway begins in South-Miami Dade and continues north up the entire east coast of Florida. The Palmetto Expressway (SR 826), Interstate 75 (I-75), and Florida's Turnpike are also major expressways that run throughout Miami-Dade County. The Miami-Dade Expressway Authority manages five (5) expressways in the county [Dolphin Expressway (SR 836), Gratigny Expressway (SR 924), Airport Expressway (SR 112), Don Shula Expressway (SR 874), and Snapper Creek Expressway (SR 878)].

Figure 2-5 and Table 2-3 present the principal interstate, freeway, and expressway arterials found in Miami-Dade County.

Figure 2-5: Miami-Dade County Interstates, Freeways, and Expressways

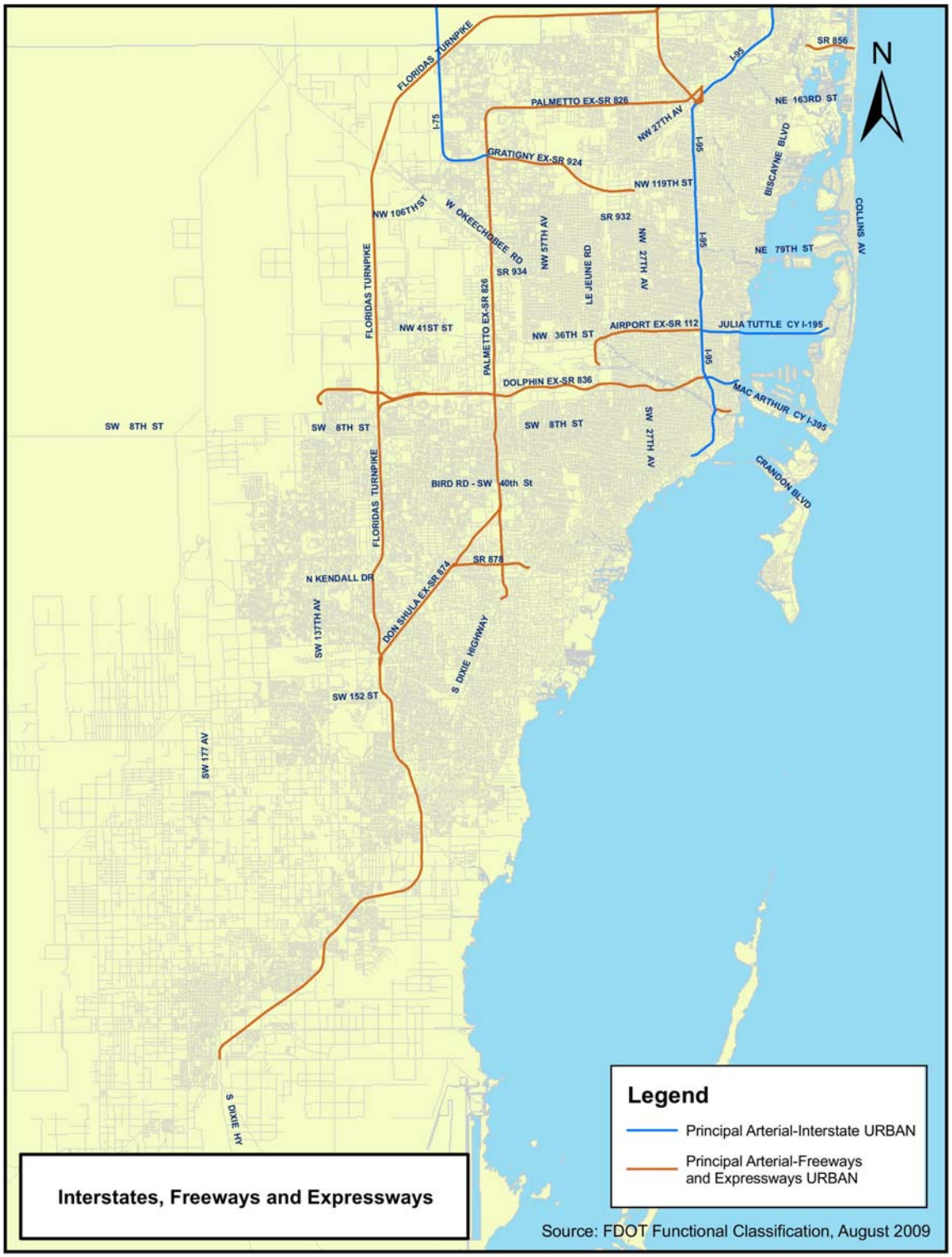


Table 2-3: Miami-Dade County Principal Interstate, Freeway, and Expressway Arterials

Principal Arterials	Direction	No of Lanes
Florida's Turnpike (SR 821)	North-South	4/6/8/10
Don Shula Expressway (SR 874)	North-South	4/6/8
Interstate (I-75) (SR 93)	North-South	8
Palmetto Expressway (SR 826)	North-South	6/8/10
Interstate (I-95)	North-South	4/6/8/10
Snapper Creek Expressway (SR 878)	East-West	4
Dolphin Expressway (SR 836)	East-West	6/8
MacArthur Causeway (I-395)	East-West	4/6
Airport Expressway (SR 112)/ Julia Tuttle Causeway (I-195)	East-West	6/8
Gratigny Expressway (SR 924)	East-West	6/8
William H. Lehman Causeway (NE 192nd St) (SR 856)	East-West	6

Source: FDOT Functional Classification, August 2009

Miami-Dade County Street Grid System

Miami-Dade County is comprised of a contiguous street grid system that stretches from downtown Miami throughout other regions of the county. The street grid system was adopted by the City of Miami following World War I. The original system was composed of named streets, with names often changing every few blocks and multiple streets in the city sharing the same name. The revised street grid was later extended throughout the county as population grew west, south, and north of Miami city limits.

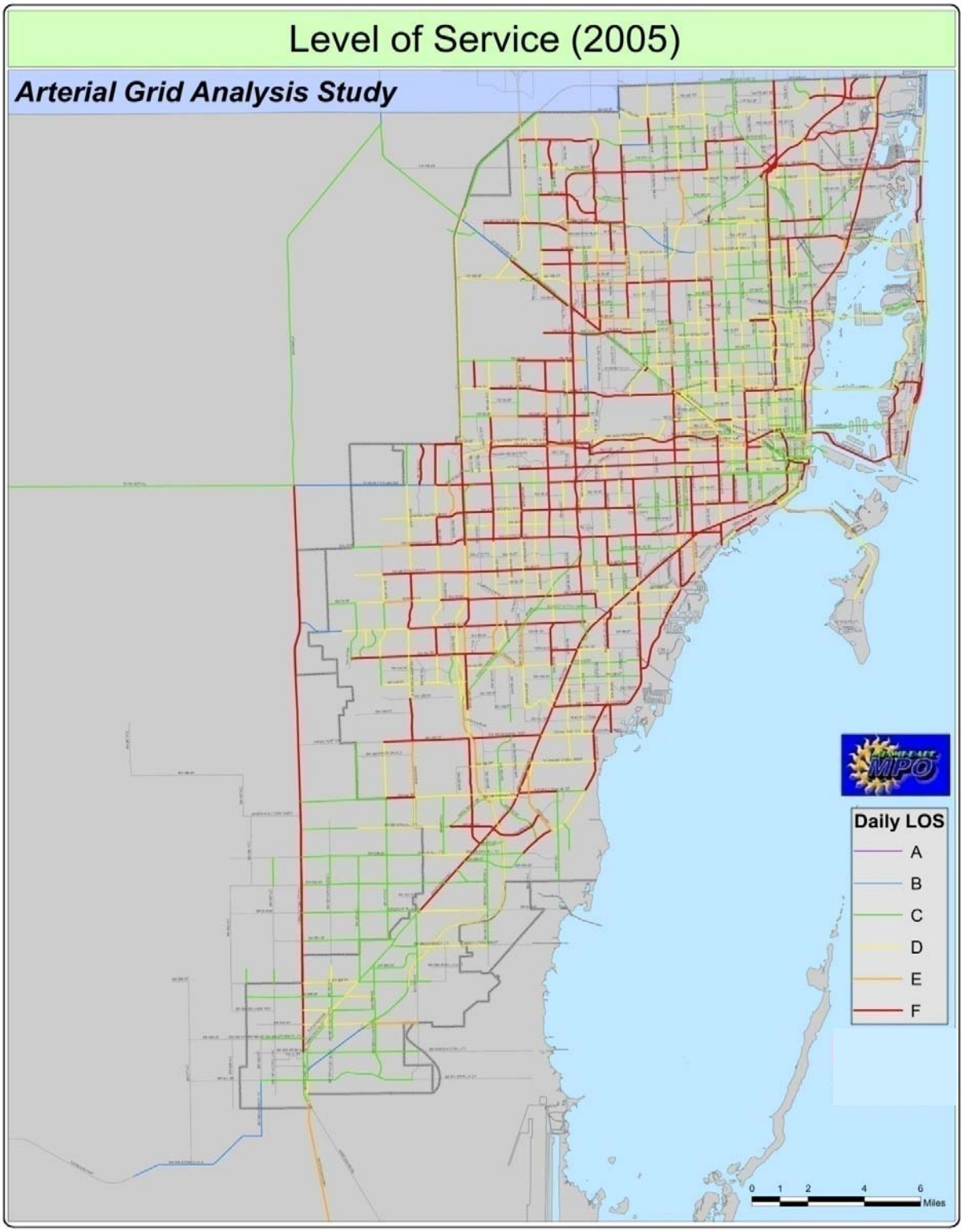
The street grid is laid out with Miami Avenue as the originating base avenue going east-west and Flagler Street as the north-south originating base street. The street grid is primarily numerical so that, for example, all street addresses north of Flagler and west of Miami Avenue have NW in their address (e.g. NW 27th Avenue). In Miami-Dade County, the NW and SW quadrants are much larger than the SE and NE quadrants. Many major roads are also named in addition to the numerical numbering system.

2.1.4 Roadway Capacity

Miami-Dade County's urbanized area experiences high levels of congestion on its roadways due to population growth and land use development patterns. Level of service maps are developed based on the volume to capacity (v/c) ratio which is a common measure of effectiveness utilized in the analysis of transportation systems. The volume is the daily traffic expected on a particular roadway. The roadway capacity is the maximum number of vehicles that can travel through a given point during a specified period under prevailing roadway, traffic and control conditions.

The v/c ratio analysis is based on best available count data describe existing conditions. The Arterial Grid Analysis Study prepared the LOS for Existing Conditions in 2007 (Figure 2-6) using methodologies established by FDOT's 2002 Quality/Level of Service Handbook for daily roadway volumes and capacities.

Figure 2-6: Level of Service (2005)



Source: MPO Arterial Grid Analysis Study, 2005

Figure 2-6 highlights the estimated v/c ratios for the roadways operating at level of service[2] (LOS) up to LOS F when the projected demand exceeds to capacity of the roadway for 2005. A transportation facility operating at LOS F implies failing conditions that are unacceptable to most drivers.

2.1.5 Miami-Dade Freight Network

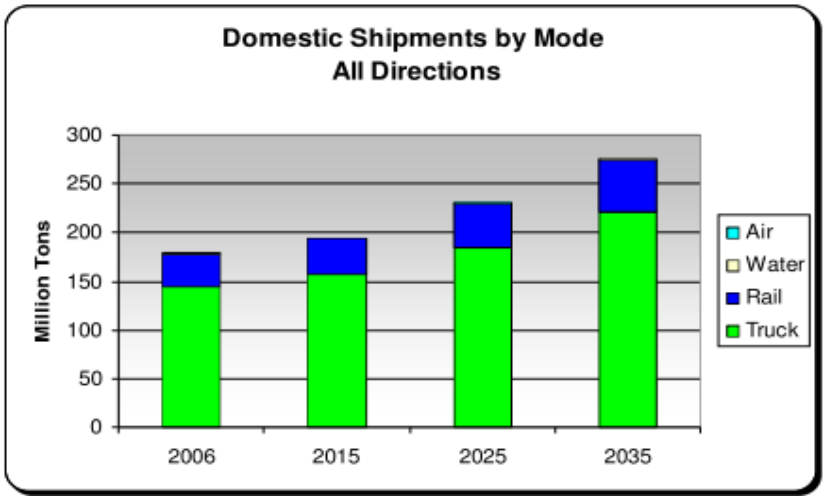
The movement of freight and goods throughout Miami-Dade County is an important facet of the local and regional economy. The major centers or hubs for freight and consumer goods include the Miami International Airport, Port of Miami, Florida East Coast (FEC) Intermodal facility, the Miami River, and the Doral warehouse district in central Miami-Dade County. Currently about as many goods are exported from Miami-Dade County as are imported into the County resulting in a 50/50 import/export ratio with Broward County representing the largest domestic trading partner with Miami-Dade County. [3] The Country of Brazil is the largest trading partner in terms of international freight and goods.

The transportation of freight within Miami-Dade County primarily moves by truck on existing roadways and highways through a network of modal connections, routes and facilities. Trucks move more than 80 percent (80%) of all domestic freight tonnage (approximately 150 million tons) while rail moves nearly all of the remaining freight tonnage. Air and water move a very small share of domestic tonnage however serve as major points of access for international imports and exports. Roadway freight traffic is anticipated to increase on roadways throughout the County in direct correlation to total traffic growth as stated in 2009 Miami-Dade Freight Plan. This will place additional demand on an already congested roadway network that has little or no remaining capacity to meet existing demand during peak weekday travel periods. Projections indicate that the tonnage of domestic freight will continue to increase over the next 30 years.

[2] LOS A and B reflect excellent condition (no delay); LOS C and D are considered satisfactory (some delay); LOS E indicated the presence of significant congestion (major delay); and LOS F reflects substantial congestion.

[3] International freight comes in to airport and seaport where some freight are transshipped but may cue for statewide and regional consumption.

Figure 2-7: Freight Shipments



Source: Miami-Dade Freight Plan, 2009

2.2 Demographic and Economic Analysis

This section reviews the study area in the context of the TDP major update process which includes a physical description of the study area, population profile and trends, demographic characteristics, and journey-to-work characteristics. A series of maps are included to illustrate select population, demographic, and journey-to-work characteristics. The primary data sources include the 2000 Census and 2005-2007 American Community Survey Data both which represent the most comprehensive current available information. Traffic Analysis Zone (TAZ) data was used as an additional source for the creation of the demographic maps within this section.

2.2.1 Data Sources

United States Census

The U.S. Census is a federal program conducted every ten years and is focused on gathering social and economic characteristics of the population. In addition, the Census collects physical and financial characteristics of households. U.S. Census data is used within this section as a basis for a longitudinal comparison from the year 2000.

American Community Survey (ACS)

The ACS provides survey data that is produced each year to measure key social, economic, and housing characteristics about the U.S. population which is similar to the decennial Census. The ACS is sent to a small percentage of the population on a rotating basis. data set was utilized to provide a more detailed snapshot into the demographic and economic characteristics within Miami-Dade County as a whole.

In 2008, ACS provided a three-year estimate (based on data collected in three consecutive years). The 2005-2007 ACS estimates are based on data collected between January 2005 and December 2007. This document sources the ACS 2005-2007 three year estimates for analytic purposes to provide a more comprehensive

descriptive average of demographic and economic conditions during this time period. To help understand the assumptions of the three-year estimates the following characteristics for this type of estimates is as follows:

- Published for selected geographic areas with populations of 20,000 or greater.
- Represent the average characteristics over the three-year period of time.
- Have larger sample size than the one-year estimates.
- Less current than the one-year estimates.

Although the ACS produces population, housing unit, and demographic estimates, it is the Census Bureau's Population Estimates Program (PEP) that produces and disseminates the official estimates of the population and housing units for the nation, states, counties, cities and towns. Specific population, demographic and housing unit characteristic PEP data for 2006 was not available below the County level and was therefore not used in this analysis. As a result, ACS three-year estimates were used for this analysis since it is recognized as a second tier reliable source of economic and demographic data.

2.2.2 Miami-Dade County Population Characteristic

According to ACS estimates for 2007, Miami-Dade County was the most populous county in Florida and the eighth (8th) most populous county in the nation. Population growth since 1990 has steadily impacted Miami-Dade County, as well as, the greater South Florida region (Table 2-4). From a regional perspective, Miami-Dade County has experienced the second largest percent change in population growth (28%) from Census estimates spanning from 1990 to 2000. Census population estimates indicate that growth in Miami-Dade County increased five percent (5%) from 2000 to 2007. In addition, tourism also greatly contributes to Miami-Dade's population. In 2007, the number of overnight visitors to Greater Miami and the Beaches rose to a record 12 million. This amount makes Miami-Dade County a premier hotel market in the nation (The Jay Malina International Trade Consortium of Miami-Dade County, Annual Report, November 2008).

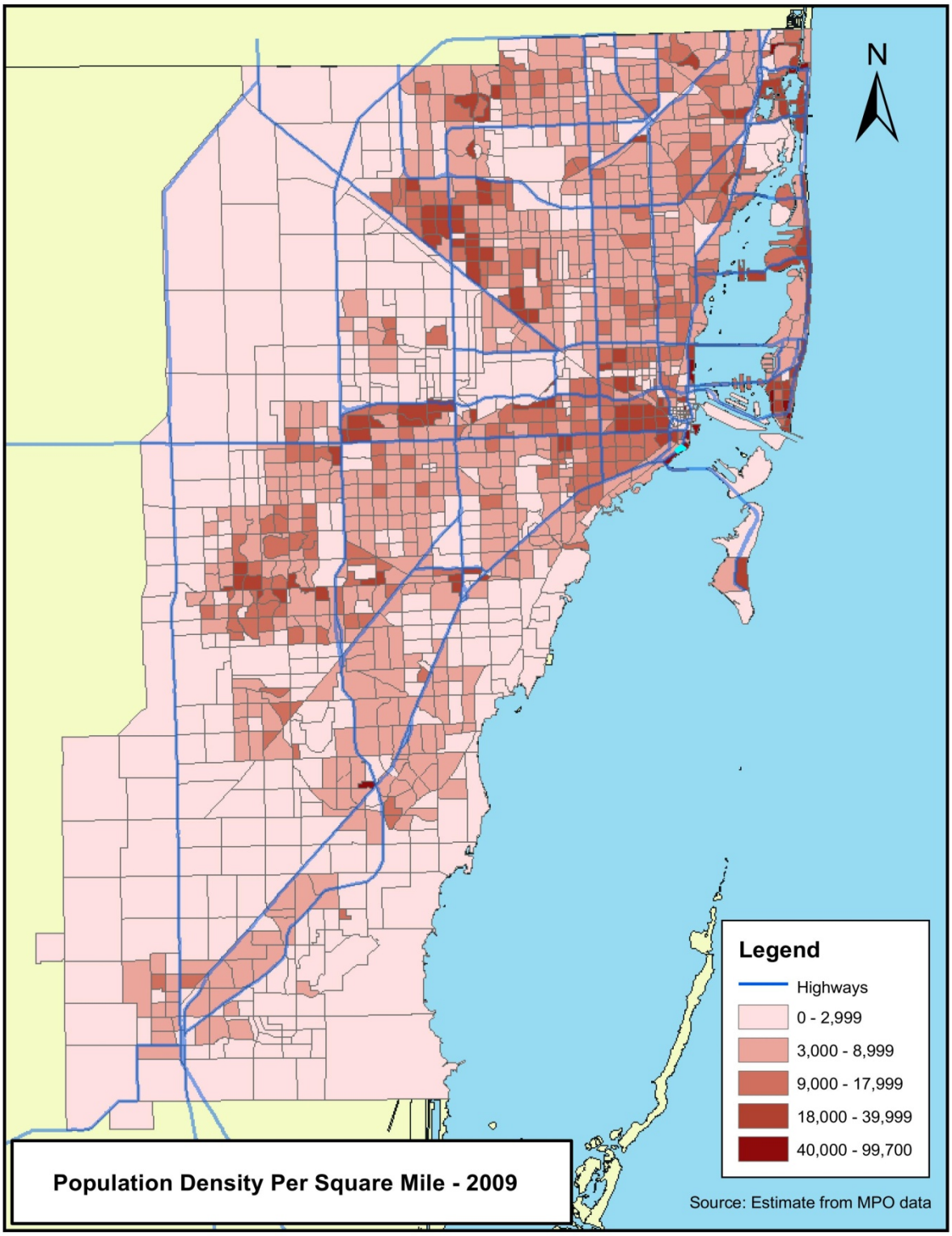
Table 2-4: South Florida Population Growth, 1990-2007

County	1990	2000	Percent Growth (1990-2000)	2007 Population Estimate	Percent Growth (2000-2007)
Miami-Dade	1,625,800	2,253,400	28%	2,370,300	5%
Broward	1,018,200	1,623,000	37%	1,761,680	8%
Palm Beach	860,520	1,131,200	24%	1,260,000	10%

Source: US Census 2000, 2005-2007 American Community Survey.

As the largest county in Florida, the current population density of Miami-Dade County is about 3,740 persons per square mile in 2009. (Figure 2-8) Density throughout the report is calculated based upon current demographic data provided from the Metropolitan Planning Organization (MPO).

Figure 2-8: Miami-Dade County Population Density, 2009



2.2.3 Age Distribution Characteristics

In 2000, Miami-Dade County had a relatively young population with the median age of 36 years old. The age distribution of age revealed that persons age 18 years and older made up three-quarters (75%) of the population. Elderly residents age 65 years and over made up 13 percent (13%), and children (under 5 years) seven percent (7%).

Table 2-5: Age Distribution Characteristics, 2000-2007

Population	Under 5 Years	18 and Over	65 Years and Over	Median Age
2000 Population				
2,253,400	7%	75%	13%	36
2005-2007 Population Estimates				
2,373,300	7%	77%	14%	38

Source: US Census, 2005-2007 American Community Survey

Trends remained consistent during the 2005-2007 time period where the proportion of persons age 18 years and over, as well as, the elderly population increased one percent (1%) from 2000 estimates. The percentage of young children remained at seven percent (7%), and the median age increased to about 38 years of age. Figure 2-9 illustrates youth population density and Figure 2-10 the elderly population density in Miami-Dade County.

Figure 2-9: Miami-Dade County Population Density under 16 Years of Age

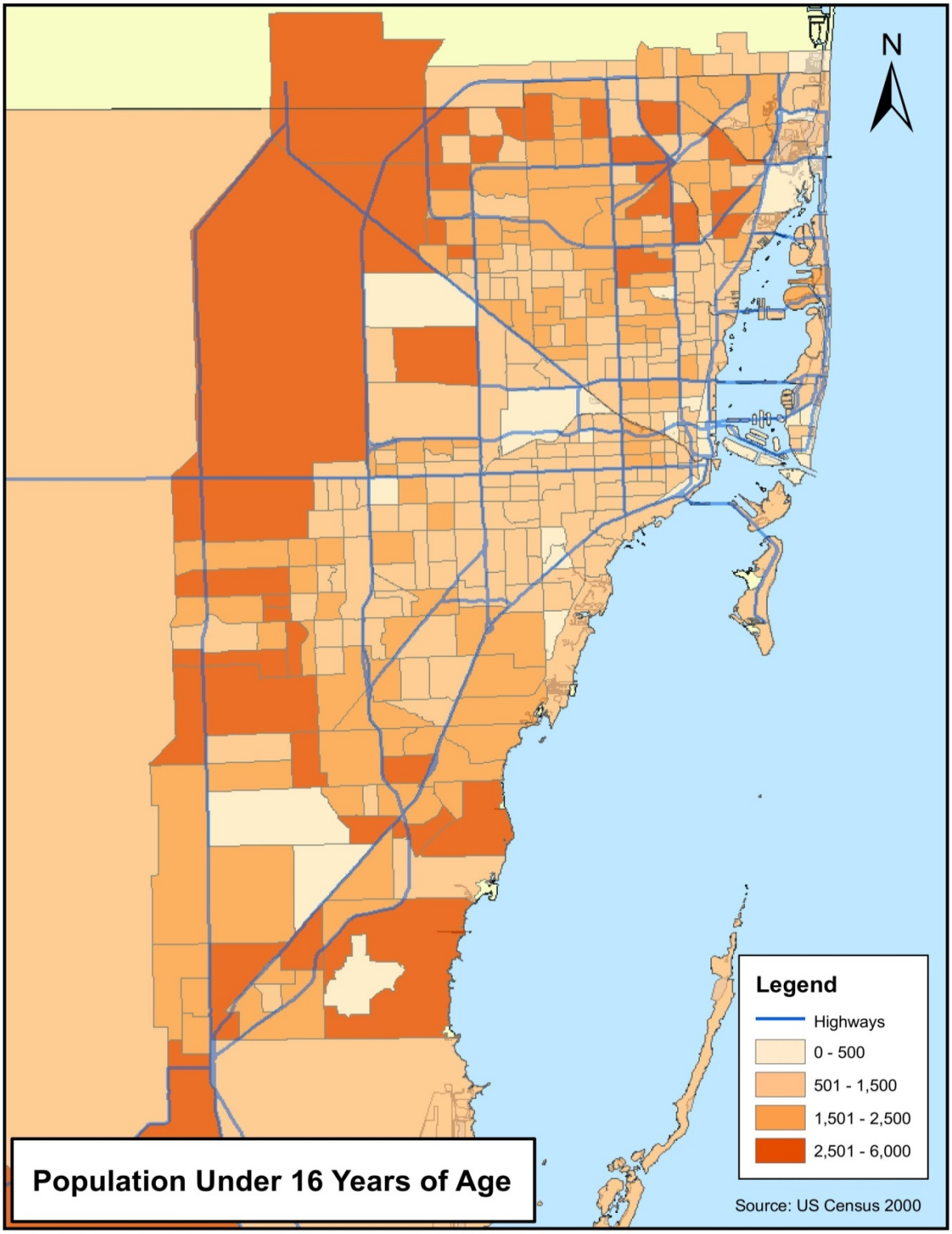
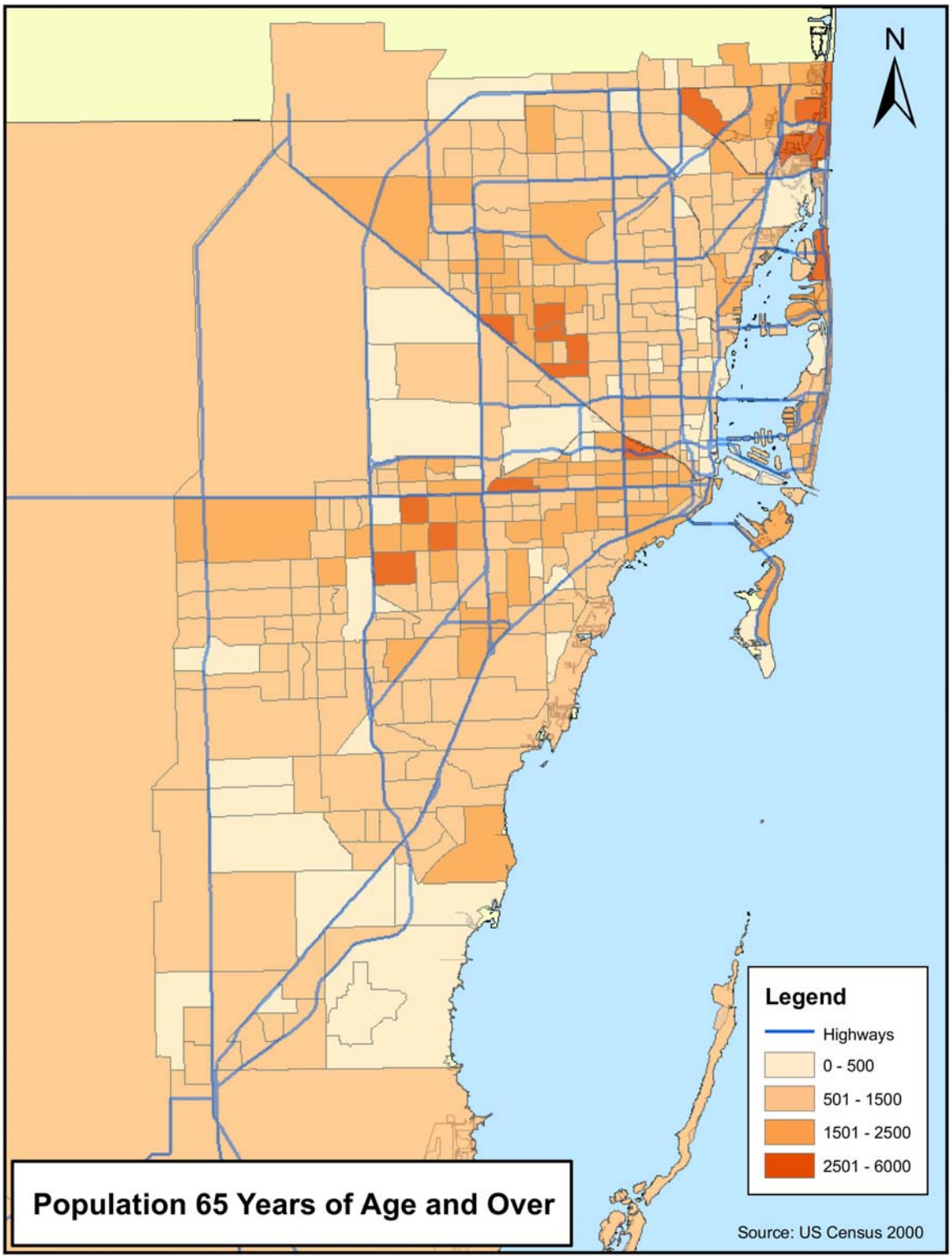


Figure 2-10: Miami-Dade County Population Density age 65 Years and Over



2.2.4 Household Characteristics

The Decennial 2000 Census reported Miami-Dade County had 777,400 households with an average household size of three (3) persons. Households with children (39%) and households with elderly (28%) comprised the majority of households within the county. One person households also represent a large portion (23%) of the total number of county households. (Table 2-6)

Table 2-6: Miami-Dade County Household Characteristics, 2000-2007

Households (HH)	Average HH size	1-Person HH	HH with children	HH with elderly
2000 Population				
777,400	3.00	23%	39%	28%
2005-2007 Average Population Estimates				
831,000	3.00	26%	35%	28%

Source: US Census, 2005-2007 American Community Survey. Notes: HH=household. HH with children are considered HH with one or more persons age 18 years and younger. HH with elderly are considered HH with one or more persons age 65 years and over.

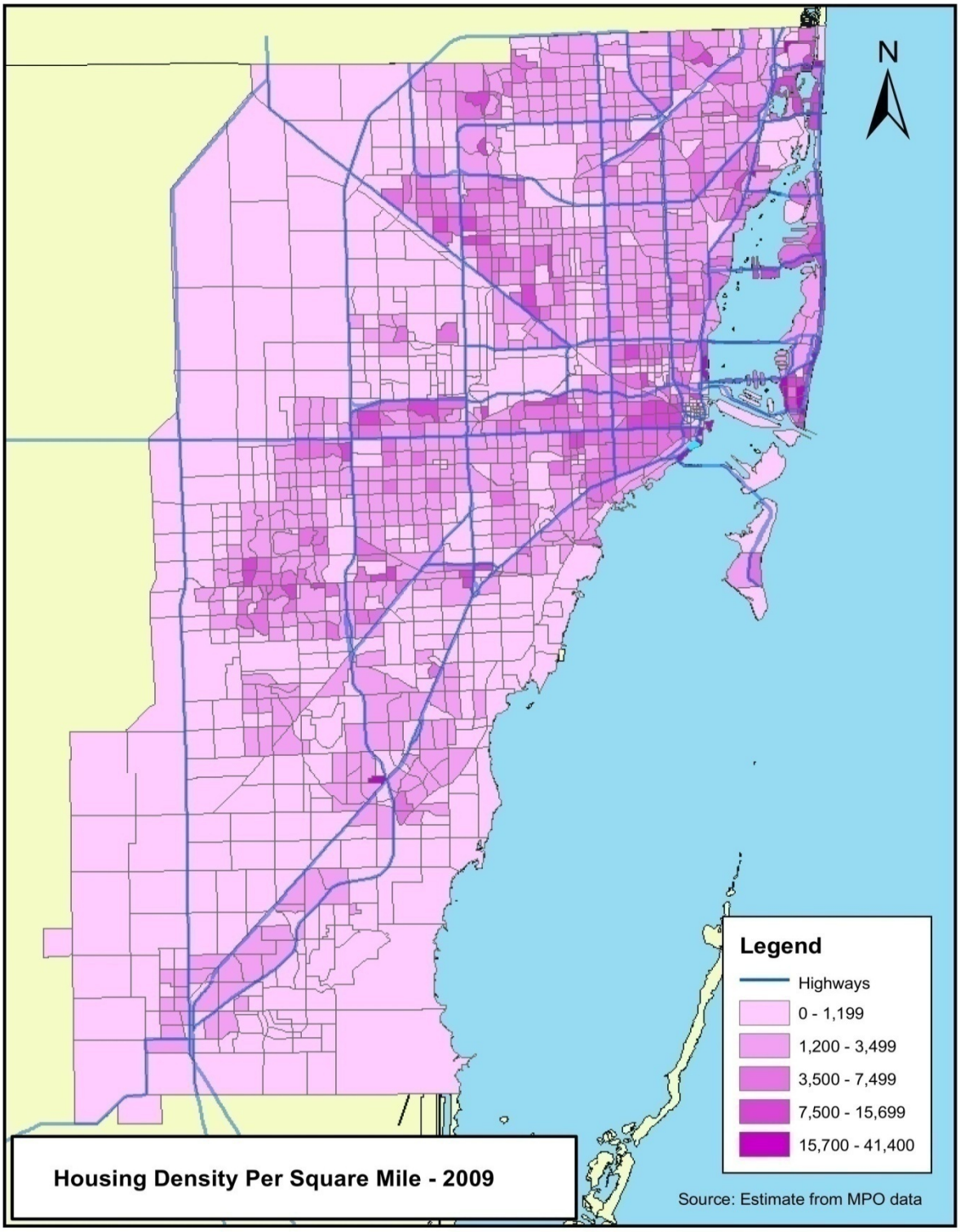
Household characteristics changed slightly during the period of 2005-2007 according to ACS three-year estimates. It was during this period that estimated number of Miami-Dade County households increased to 831,000 households with an average household size of three (3) persons.

The types of households in Miami-Dade County were comprised of various family types. The majority of households (35%) continued to be those with children age 18 and younger, but experienced a slight decrease from 2000 estimates. Following closely were households with elderly; remaining at 28 percent (28%) of all county households. Three year estimates also revealed that the number of one-person households increased three percent (3%) from 2000, indicating a higher proportion of persons living alone in the county.

Miami-Dade County Housing Density

Miami-Dade County is primarily considered a community of single-family homes. Within recent years there has been an exponential increase in the construction and renovation of condominiums and townhomes, as well as, urban redevelopment which has together lead to greater vertical development. This is also due to the lack of available land within the urban growth boundary and the redevelopment of urban centers. Much like similar metropolitan cities within the nation Miami-Dade County offers high-density living in the downtown and many urbanized areas. Housing densities based upon MPO estimated data for 2009 is currently 1,307 households per square mile as presented in Figure 2-11.

Figure 2-11: Housing Density (2009)



2.2.5 Racial and Ethnic Characteristics

Miami-Dade County proudly boasts itself as one of the most diverse regions in the state of Florida in terms of race and ethnicity. In 2000, for people reporting one race alone, 70 percent (70%) were white and 30 percent (30%) non-white. From 2005-2007, the percentage of whites increased to 72 percent (72%) and non-white 28 percent (28%). The Hispanic community in Miami-Dade County comprised more than half of the entire population in both 2000 (57%) and during 2005-2007 (61%). The Hispanic community includes persons of Hispanic origin of any race and remains the largest ethnic group represented in Miami-Dade County. (Table 2-7)

Table 2-7: Miami-Dade County Racial Characteristics, 2000-2007

Population	Percent White	Percent Non-white	Percent Hispanic
2000 Population			
2,253,400	70	30	57
2005-2007 Average Population Estimates			
2,373,300	72	28	61

Source: US Census, 2005-2007 American Community Survey

2.2.6 Travel Time to Work

Travel times commuting back and forth to work are steadily increasing throughout the South Florida region. A majority of residents living in western regions of the county reported travel times between 30 to 45 minutes. This reveals that residents are spending longer amounts of time commuting in traffic to reach places of employment each work day. Figure 2-12 and Figure 2-13 illustrates commute time to work increases significantly for residents living in the outer western regions.

Table 2-8: Miami-Dade County Distribution of Workers by Industry, 2005-2007

Industry	2005-2007
Agriculture	0.5%
Construction	9.2%
Manufacturing	5.7%
Wholesale Trade	5.2%
Retail Trade	11.4%
Transportation and warehousing	7.6%
Information	2.3%
Finance, Insurance, Real Estate, Rental and Leasing.	8.5%
Professional, scientific, management, administrative and waste management services	11.8%
Educational services, and health care and social assistance.	18.9%
Arts, entertainment, and recreation, and administrative and waste management services.	9.1%
Other services, except public administration	6.0%
Public administration	3.8%

Source: 2005-2007 American Community Survey. Note: Estimates include civilians employed in population age 16 years and over only.

Figure 2-12: Miami-Dade County Commute Times Greater than 30 Minutes in 2000

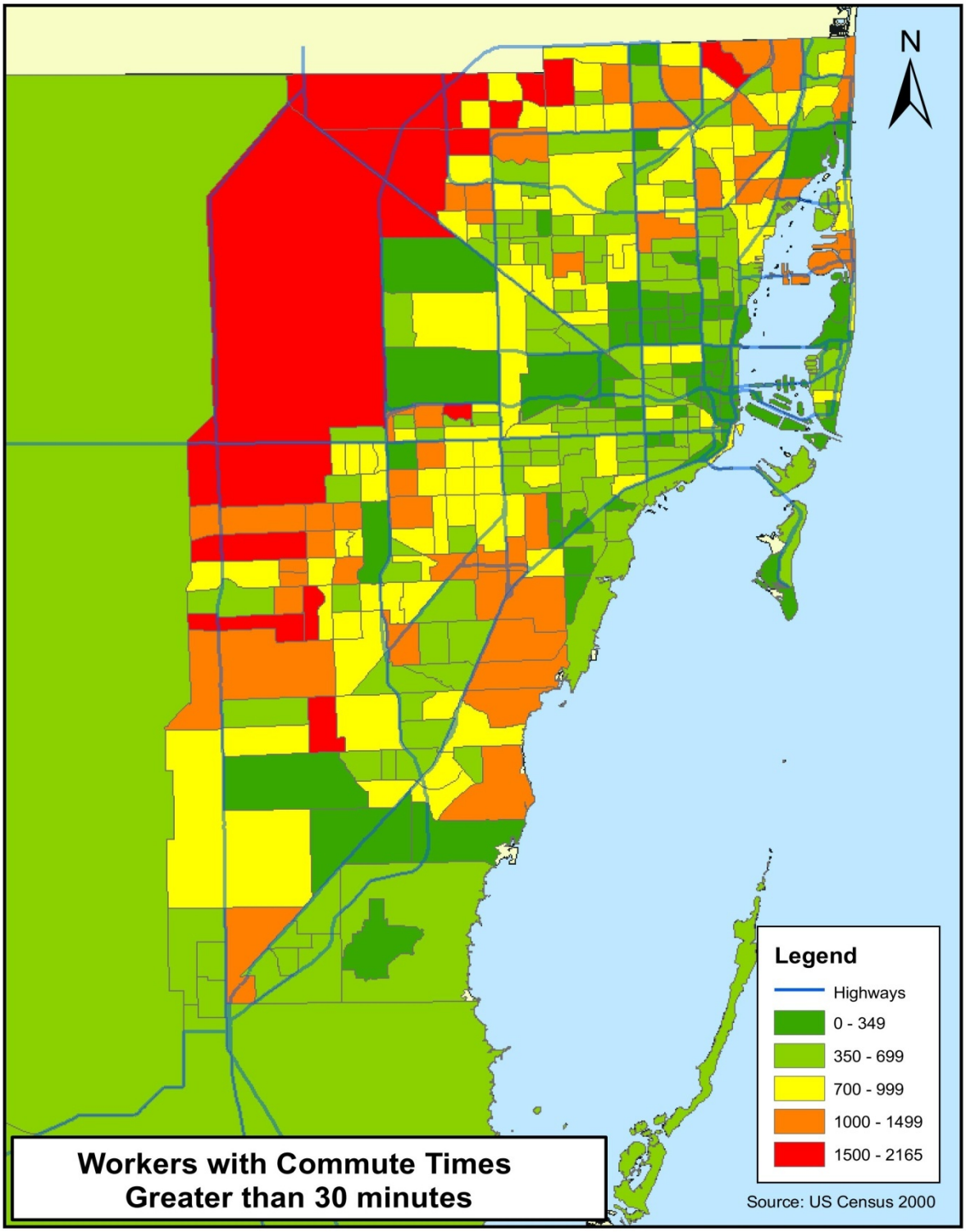
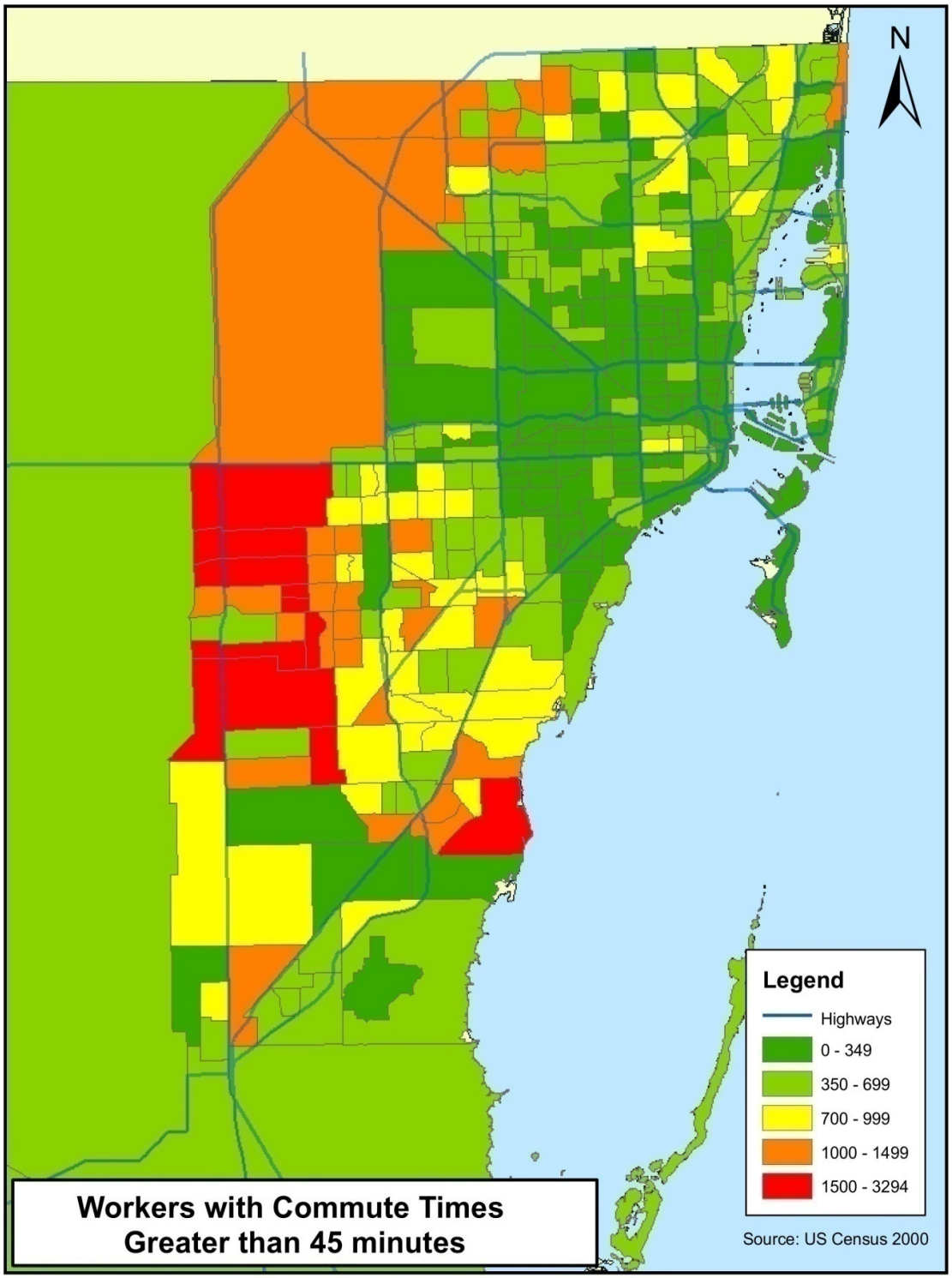


Figure 2-13: Miami-Dade County Commute Times Greater than 45 Minutes in 2000



2.2.7 Transportation Disadvantaged Population Characteristics

Transportation Disadvantaged (TD) populations refer to a special population that is most likely to benefit from improved and expanded transit services provided by MDT. Chapter 427 of the Florida Statutes defines transportation disadvantaged (TD) persons as:

> *"Those persons who because of physical or mental disability, income status, or age are unable to transport themselves or to purchase transportation and are, therefore, dependent upon others to obtain access to health care, employment, education, shopping, social activities, or children who are handicapped or "high-risk" or "at-risk" as defined in s.411.202."*

Persons within this population often rely on public transit as the major motorized form of transportation utilized. The US Census provides four categories that describe TD populations. These include the following groups:

- Families below Poverty Level
- Zero Vehicle Population[4]
- Mobility Limited[5]
- Elderly persons age 65 and older

Table 2-9 presents the Miami-Dade County Transportation Disadvantaged Characteristics for the time period of 2000 to 2007.

Table 2-9: Miami-Dade County Transportation Disadvantaged Characteristics, 2000-2007

Population	Families Below Poverty	Disabled	Zero Vehicle Population	Elderly Age 65 and older
2000 Population				
2,253,400	15%	7%	4%	13%
2005-2007 Population Estimates				
2,373,300	13%	5%	5%	14%

Source: US Census, American Community Survey 2005-2007. Note: Disabled individuals include persons 16 years and or older who have difficulty going outside by themselves.

Employment

Miami-Dade County has a diverse employment industry which spans many different fields and industries. The major public and private employers within Miami-Dade County are presented in Table 2-10 and represent a broad cross-section of industries including retail, county government, and healthcare industries. According to ACS estimates the five (5) major industries within Miami Dade County include educational

[4] Households reporting zero automobiles at home for personal use.
[5] Introduced in Census 2000 referring to limited individuals with a "Go Outside home disability for civilians not institutionalized over 16 years."

services (18.9%), professional, scientific, and management (11.8%), retail trade (11.4%), Construction (9.2%), and arts, entertainment recreation (9.1%) (Table 2-8).

Despite this diverse employment culture, the Miami-Dade County population includes factions of residents which are economically disadvantaged, children at-risk, disabled community, seniors, and unemployed, the homeless, and adults at-risk. There are over 130,000 economically disadvantaged seniors and approximately 5,000 Social Security [SSI & SSDI] enrolled in the Golden Passport program; approximately 300,000 Medicaid recipients, and approximately 25,000 enrolled in the Special Transportation Services program for the disabled.

The total economically disadvantaged population is growing and projections indicate that the disadvantaged population will exceed 900,000 in Miami-Dade County. The continuing increase in gas prices, maintenance, parking, and other available resources have impacted the working poor. Many will not use their vehicles to travel to work sites, job opportunities, training, day care, and other daily activities.

Table 2-10: Miami-Dade County Major Employers

Public Employers		Private Employers	
Organization	**Employment**	**Organization**	**Employment**
Miami-Dade Public Schools	50,000	Publix Super Markets	11,000
Miami-Dade County	32,000	Baptist Health of South Florida	10,826
Federal Government	20,400	University of Miami	9,874
Florida State Government	17,000	American Airlines	9,000
Jackson Health System	10,500	Precision Response Corporation	6,000
Miami-Dade College	6,500	Bellsouth Corporation-Florida	5,500
City of Miami	4,034	Winn-Dixie Stores	4,833
Florida International University	3,132	Florida Power and Light	3,900
V A Medical Center	2,300	Carnival Cruise Lines	3,500
City of Miami Beach	1,979	Macy's Florida	3,368

Source: Miami Business Profile, Beacon Council, 2007

Income Characteristics

In 2000, Miami-Dade County median income of households averaged about $36,000. Family poverty levels and households participation in government programs were 15 percent (15%) and six percent (6%) respectively. The numbers of persons working in the labor force in 2000 were estimated to be more than half of the total population (58%).

During 2005-2007 income characteristics in Miami-Dade County experienced moderate growth. (Table 2-11) The median household income rose from year 2000 levels and was about $42,000. Also within this period the number of families living below poverty (13%) and receiving public assistance (2%) decreased. Most noteworthy is that a greater proportion of the population is gainfully employed in the labor force and was estimated to be about 61 percent (61%) of the population.

Table 2-11: Miami-Dade County Income Characteristics, 2000-2007

Households HH	Median HH Income	Families Below Poverty	Per Capita Income	HH receiving Public Assistance	In Labor Force
2000 Population					
777,400	$ 36,000	15%	$ 18,500	6%	58%
2005-2007 Population Estimates					
830,800	$ 41,900	13%	$ 22,500	2%	61%

Source: US Census, 2005-2007 American Community Survey

Note: 2000 Estimates for Median HH Income and Per Capita income represent 1999 inflation-adjusted dollars. 2005-2007 Estimates for Median HH income and per capita income is represented in 2007 inflation-adjusted dollars. Labor force represents the population 16 years and over. Public assistance includes food stamp benefits and cash public assistance income.

Zero Vehicle Populations

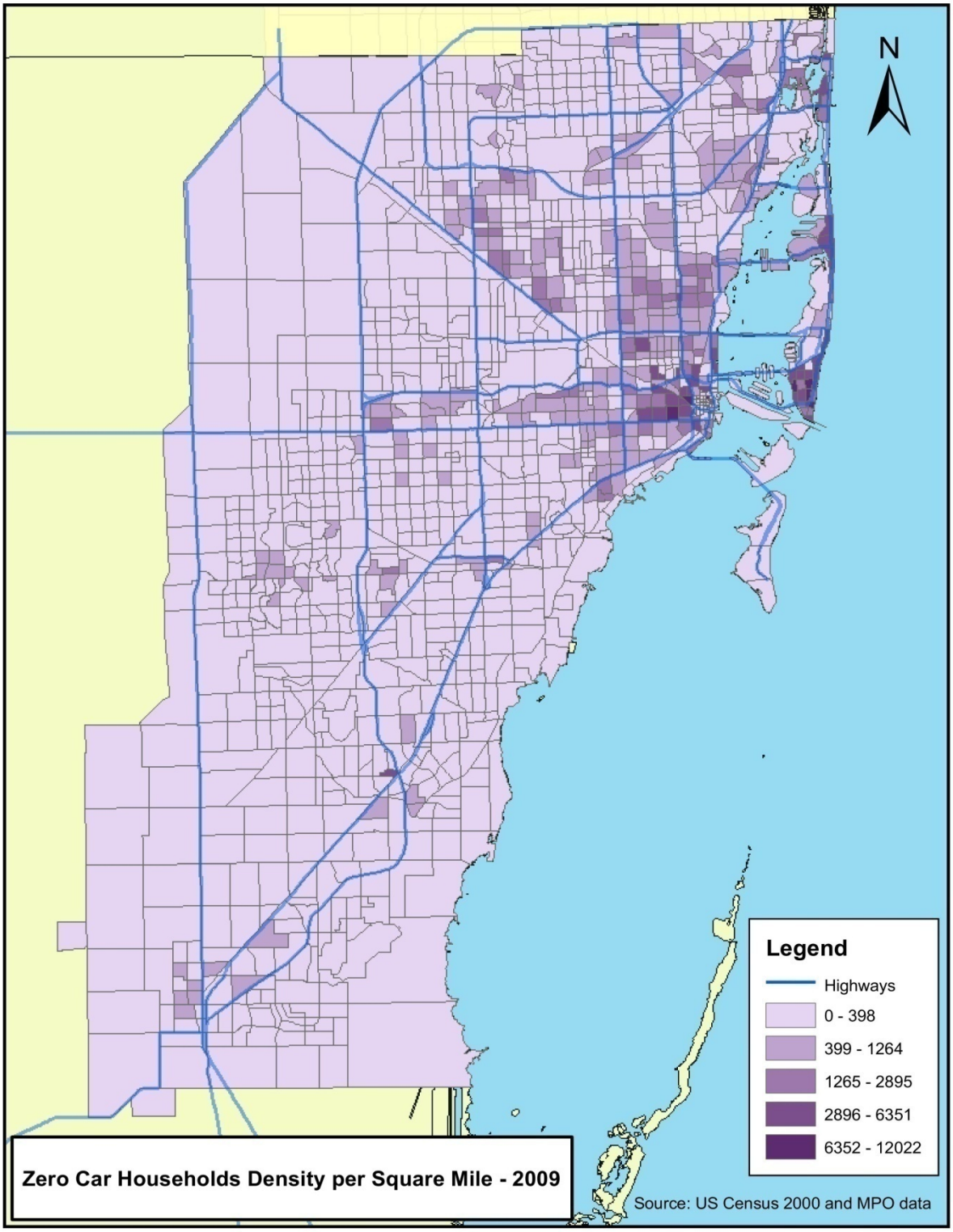
The Census provides the number of vehicles available to each household in its yearly estimates. From this data we can determine the percentage of the population with no vehicles available for personal use that is most likely to use transit services within the county. Households in this category may be the result of personal choice to not own a vehicle, physical ability to operate a vehicle, or the lack of financial means by which to own a vehicle. In 2000, households with zero vehicles available made up five percent (5%) of the population. During the period of 2005-2007, four percent (4%) of Miami-Dade County's population were zero vehicle households. (Table 2-12) Figure 2-14 illustrates 2009 zero car household densities.

Table 2-12: Number of Vehicles Available, 2005-2007

	Number of Vehicles Available			
Population	**0**	**1**	**2-3**	**4 +**
2000 Population				
2,253,400	5%	13%	15%	1%
2005-2007 Population Estimates				
2,373,300	4%	13%	16%	1%

Source: US Census, 2005-2007 American Community Survey

Figure 2-14: Zero Car Household Density, 2009



Mobility Limited

An important component of understanding TD populations is the identification of the number of mobility limited persons residing within Miami-Dade County. For the mobility limited, the transit dependence stems from the inability to go outside of the home alone. This category does not include persons that are institutionalized and would otherwise not leave the home without assistance (for example, persons in a nursing home).

In 2000, a total of 11 percent (11%) of Miami-Dade County's population age 16 and over were considered mobility limited. According to average estimates compiled from the Census for the time period between 2005 and 2007, a total of five percent (5%) of county residents were mobility limited. The number of mobility limited elderly persons age 65 and over in the county during this same period was estimated at three percent (3%). (Table 2-13)

Table 2-13: Mobility Limited Populations, 2000-2007

Population	16 to 64 years	65 and over
2000 Population Estimates		
2,253,400	7%	4%
2005-2007 Population Estimates		
2,373,300	2%	3%

Source: US Census, 2005-2007 American Community Survey

2.3 Regional Transit Service Connections

This section provides a brief overview of the public transportation service providers that provide connections to the Miami-Dade Transit System.

2.3.1 South Florida Regional Transportation Authority

The South Florida Regional Transportation Authority (SFRTA) provides north-south commuter rail service (Tri-Rail), along a 72-mile corridor that spans Palm Beach County, Broward County, and Miami-Dade County with service to 18 stations. Tri-Rail primarily runs through the eastern urbanized areas and passes by the major downtowns of the various cities of each county starting from the Mangonia Park station in Palm Beach County continuing south to Miami International Airport (MIA) in Miami-Dade County. Table 2-14 presents Tri-Rail Stations and corresponding MDT route connections.

Table 2-14: Tri-Rail Stations and MDT Route Connections

Tri-Rail Station	MDT Route	Major Destinations	Tri-Rail Station	MDT Route	Major Destinations
Golden Glades	E	Miami Lakes Corporate Center, Golden Glades Park and Ride, Opa Locka City Hall, Aventura Mall and Mall at 163rd Street	Opa Locka	E	Miami Lakes Corporate Center, Golden Glades Park and Ride, Opa Locka City Hall Aventura Mall and Mall at 163rd Street
	22	The Mall at 163rd Street, University of Miami/Jackson Memorial Hospital/Clinics		32	Florida Memorial University, Miami-Dade College-North Campus St. Thomas University, Northside Metrorail Station, Santa Clara Metrorail Station, Omni Mover Terminal
	42	Golden Glades Park and Ride, Opa Locka City Hall, Douglas Road Metrorail Station, Coconut Grove Metrorail Station, MIA			
	77	Culmer Metrorail Station, Government Center Metrorail Station, Golden Glades Park and Ride	Tri-Rail/ Metrorail Transfer	L	Lincoln Road, Miami Beach Convention Center, Amtrak Terminal, Hialeah Metrorail Station
	95 Express	Golden Glades Station, Downtown Civic Center, Earlington Heights Metrorail Station		42	Golden Glades Park and Ride, Opa Locka City Hall, Douglas Road Metrorail Station, Coral Gables Metrorail Station
	246 Night Owl	Government Center Metrorail Station, Civic Center Metrorail Station, Jackson Hospital North, The Mall at 163rd Street	Hialeah Market	132 Doral/Tri-Rail Shuttle	Koger Executive Center, Doral Country Club, Hialeah Station
	277 7th Ave MAX	Downtown Miami, Government Center Metrorail Station, Culmer Metrorail Station, NW 7 Ave., Lindsey Hopkins, Edison Center, North Miami, Biscayne Gardens, Golden Glades Park & Ride	Miami International Airport	37	Hialeah Metrorail Station, Douglas Road Metrorail Station, Miami International Airport, South Miami Metrorail Station MIA, Hertz Car Rental, Tri-Rail Station
				133 Airport/Tri-Rail Shuttle	Windham Airport Hotel, MIA, Hertz Car Rental, Tri-Rail Station
				238 East-West Connection	Dolphin Mall, MIA, Earlington Heights Metrorail Station

Source: Miami-Dade Transit, June 2009

Weekday service spans from 4:00 AM to 11:05 PM, with operations of 20 minute headways in each direction during both the morning and evening peaks, including 30-minute headway transitions between the 20-minute peak headway service and the hourly off-peak service. Tri-Rail operates a zonal fare system and is comprised of six (6) equidistant zones. Fare is determined by the sum of zones traveled and base fares were recently raised June 2009. The regular base fare for one way travel is $2.50, discounted one-way is $1.25, regular roundtrip is $4.40 and discounted roundtrip is $2.50. The cost for the Tri-Rail monthly pass is $100 ($50.00 discounted).

Tri-Rail passengers transferring from Tri-Rail at a Tri-Rail transfer point to Metrobus may purchase transfers (0.50 cents) with valid Tri-Rail ticket. Free transfer is provided to MDT subsidized shuttles (Airport/Tri-Rail Shuttle and Doral/Tri-Rail Shuttle) for Tri-Rail passengers. Passengers transferring from Tri-Rail to MDT Express buses must pay full fare for these routes. Passengers transferring from MDT to Tri-Rail may obtain a free transfer card from bus operator to be presented for a $1.75 entitlement towards Tri-Rail fare.

Tri-Rail has five (5) station locations in Miami-Dade County to connect with MDT services including both Metrobus and Metrorail. The five (5) Tri-Rail stations include Golden Glades (Metrobus routes 22, 42, 77, 95 Express, E, 246, 277), Opa-Locka (Metrobus routes 32, 42, E), Tri-Rail/Metrorail Transfer (routes 42, L, Metrorail), Hialeah Market (Metrobus route 132), and Miami Airport station (Metrobus routes 37, 133, 238).

2.3.2 Broward County Transit (BCT)

The Broward County Office of Transportation operates Broward County Transit (BCT), fixed route bus service, which connects with MDT service. BCT operates 43 routes during weekdays, 41 routes on Saturday and 37 routes during Sundays, with varying service schedules spanning from before 4:00 AM to after midnight on weekdays. Regular one-way fare is currently $1.25 but is scheduled to increase to $1.50 in October 2009. A reduced one-way fare is $0.60, and an all day pass cost $3.00. Passengers transferring from BCT to MDT are provided a free transfer and required to pay the appropriate upgrade fare for MDT upon entering the system. In 2007, Broward County Office of Transportation initiated a new limited stop transit service called the Breeze. Breeze service currently operates two routes (US 441/SR 7 and US 1) that provide service from northern Broward County into Miami-Dade County. New articulated buses transport riders on the US 441/SR 7 route.

BCT and MDT are partnering together to provide increased regional bus service between Broward and Miami-Dade Counties beginning March/April 2010. Currently, MDT buses travel into Hallandale Beach (southeast Broward), and BCT buses travel into Miami-Dade County in areas such as Aventura, North Miami, Miami Gardens, and the Golden Glades Interchange. Table 2-15 lists those locations and BCT bus routes that provide connecting service to Metrobus routes:

Table 2-15: BCT Routes Serving Miami-Dade County

Bus Route	Service Connection Location
1	Aventura Mall, US 1
2	NW 207 Street, University Drive
18	Golden Glades Park and Ride, State Road 7
28	Aventura Mall, State Road 7
State Road 7 441 Breeze	State Road 7, Ives Dairy Road, Miami Gardens Drive, County Line Road, Golden Glades Park and Ride
University Breeze	Miami Gardens Drive, Golden Glades Park and Ride
US 1 Breeze	Aventura Mall, US 1

Source: Broward County Transit, 2009

Additional bus service from both agencies will be added to operate within the newly constructed express lanes on I-95 to connect northern and central Broward communities with downtown Miami.